

MANPRINT Quarterly



Spring 1999

Director's Corner

Well, it is now almost eight months since I assumed the post of Acting Director, Personnel Technologies. While this is much longer then I ever expected to serve as Acting Director the time has provided me with some insights regarding MANPRINT that I want to share with you.

We need to establish close links with the Acquisition Community whether that is with policy offices, program managers, program executive officers, or system contractors. The linkage between the MANPRINT domains and "our clients" must be based on trust and a degree

Contents...

The Director's Corner
Article: The Manpower and Personnel Integration (MANPRINT) General Officer Steering Committe (GOSC), LTC (P) Mitchell A. Howell, Chairman, GOSC Working Group2
Meeting of Interest4
1999 MANPRINT Symposium Agenda5
MANPRINT Symposium '99 Pre-Registration Form7
Article: AIS MANPRINT Management Tool8
FY 99 MANPRINT Training Schedule9
MANPRINT Information
Reader's Response11

of collegiality I find currently lacking. Adversarial relationships only breed adversaries. For us to have a positive impact on the acquisition process we must provide value added to that process.

While I recognize that all of you are overworked and under-resourced, I urge you to participate in ICTs and IPTs. It is only through your early involvement in either the concept development phase or actual acquisition phases that your expertise will have the desired outcome.

I met on the 19th of May with representatives from each of the MANPRINT Domains as well as TRADOC and ALMC. I believe this was a fruitful meeting and laid the groundwork for follow-on get-togethers for those who are responsible for policy and those who actually perform the work.

The MANPRINT Symposium scheduled for 18-19 August will bring together a number of key VIP members of the Army Secretariat, Army Staff, and MACOMs that have direct involvement with MANPRINT. I urge all of you to attend this meeting if you can (see pages 5-7).

By the time you read this issue LTC Larry Thurman and LTC Russ Poling will have left the Directorate. Larry is headed for an assignment with ASA ALT while Russ will become a PMS at the University of Scranton in Pennsylvania. Also, Dr. Don Headley has left PERTEC for a better life at Ft Belvoir, OPTEC, and HRED HQ. We wish them all well. They will be missed. Major Andrew Stass has joined our family and we anticipate two LTC's in late fall. One will be assigned to HQ TRADOC in the Combat Developments Directorate while the other will have duty station here in the Pentagon.

Dr. Bob HolzActing Director
Personnel Technologies

The Manpower and Personnel Integration (MANPRINT) General Officer Steering Committee (GOSC)

LTC (P) Mitchell A. Howell, Chairman, GOSC Working Group

The MANPRINT GOSC has been a pivotal force and has re-energized the efforts to fully integrate human considerations in acquisition programs. In February 1996, Mrs. Sara Lister, Assistant Secretary of the Army, Manpower and Reserve Affairs (ASA(M&RA)), and Mr. Gilbert Decker, Assistant Secretary of the Army for Research, Development, and Acquisition, commissioned an audit of MANPRINT. The U.S. Army Audit Agency (AAA) assessment addressed the effectiveness and extent of MANPRINT integration in weapon systems development, the impact of acquisition streamlining on the MANPRINT program, and efficiencies within the MANPRINT community. AAA completed the audit in February 1997 and provided a final report on 10 June 1997.

The audit revealed that MANPRINT was incorporated in eight of the nine systems reviewed, but that many of the control measures responsible for these successes were eliminated through acquisition streamlining reforms. The audited systems included developmental, non-developmental, and product improvement programs. The audit also revealed that acquisition reforms, implemented through revisions to DOD Instruction (DODI) 5000-1 and 2R, created opportunities to enhance MANPRINT integration in the system acquisition process. The audit recommended that combat and materiel developers focus on the total system (soldier and hardware) early in the acquisition cycle, that MANPRINT training be updated and included in selected curriculums, and that the MANPRINT community improve general awareness of MANPRINT benefits throughout the Army.

As a result of the audit, Mrs. Lister and General Griffith, Vice Chief of Staff of the Army (VCSA), chartered the MANPRINT GOSC to address five specific issues:

- 1. Review all recommendations documented by AAA and establish corrective actions, milestones, and accountable action agencies.
- Examine current applications of MANPRINT principles and independently study improvements or modernization of current technology.
- 3. Examine the most effective funding methodologies for MANPRINT activities.
- 4. Recommend potential mission or function changes as needed.
- 5. Recommend any organizational changes needed in the Department or other structures to support a more effective mission.

The GOSC was co-chaired by the Deputy Under Secretary of the Army, Operations Research (DUSA(OR)), Mr. Walter W. Hollis, and the Principal Deputy ASA(M&RA), Mr. Archie Barrett. Members (by position) included ASA (RDA) Military Deputy, HQDA DCSPER, HQDA DCSOPS, HQDA DISC4, DCG TRADOC, DCG AMC, CDR OPTEC, CDR PERSCOM, Director Army Safety, and the Surgeon General. The Co-chairs created a working group from member organizations to facilitate identification and resolution of issues.

The GOSC met 4 times from 9 Jul 97 through 4 Aug 98. Mrs. Lister clarified the intent at the first GOSC meeting on 9 Jul 97 when she charged the group of senior uniformed military leaders with determining the future direction and value of the MANPRINT program. She stated that she would, in fact, terminate the program if recommended by

the GOSC. However, if the GOSC determined that MANPRINT was valuable to the Army, then GOSC members should take actions to reinvigorate the program.

During the first meeting, the GOSC agreed that MANPRINT was an important program for the Army. It further agreed that the Army needed to enhance understanding and commitment to MANPRINT, that MANPRINT should apply to all acquisition categories for both weapons and automated information systems, and that the acquisition community would not re-implement mandatory documentation controls that existed prior to the revision of DOD 5000-1 & 2R.

To add emphasis to the GOSC and the importance of its charter, GEN Griffith, VCSA, provided guidance at the second meeting on 28 Aug 97. He expressed concern over the deterioration of the MANPRINT program, stated that MANPRINT training should be mandatory for all Army PMs, and that soldier requirements should be in every requirements document in every acquisition category. He closed his comments emphasizing 'MANPRINT considerations are not just about soldier comfort, they affect the ability to operate efficiently on the battlefield'. These comments became a catalyst and have helped focus the Army's efforts to reduce operating costs while maximizing resources through better integration of human elements and systems. The GOSC recognized that considering soldier performance early in the life cycle and as an integral part of the total system will result in enhanced system performance.

The working group had responded to GOSC guidance and developed a list of issues to be addressed to respond to the current needs of the MANPRINT program:

- 1. How do we enhance understanding and commitment to MANPRINT?
- 2. Is a mechanism needed to ensure that MANPRINT is included in all categories?

- 3. What changes are needed in requirements documentation to ensure the human element is fully integrated?
- 4. What is the optimum organizational structure to facilitate integration of domain issues?
- 5. Should MANPRINT functions and organizations be funded through different channels?
- 6. Should the Army attempt to influence DOD HSI policy and guidance?

After reviewing these issues, the GOSC directed the working group focus on marketing, training, and education for issue 1; determine a mechanism for resolving issue 2; and determine required language for including policy in PAM 71-9 (TRADOC) to address issue 3. They combined issues 4 and 5 due to complexity and connectivity, and tabled issue 6 until further notice.

The third GOSC met on 29 September 1997. The Working Group provided updates on the revised issues and received guidance. For issue 1, the working group had reviewed Defense Acquisition University (DAU), Defense Systems Management College (DSMC), and Army acquisition related courses, as well as MANPRINT and non-acquisition related training courses. Additionally, the GOSC directed a review of MANPRINT marketing tools and methods, and ways to assess effectiveness and to identify opportunities. For issue 2, the WG proposed and the GOSC accepted the use of key controls for MANPRINT success identified in the AAA audit. The controls included a forum or process to ensure consideration of domain issues, a process used to record and track issues, coordination and integration among MANPRINT domains, and commitment and compliance throughout the Army. For issue 3, TRADOC modified their guidance to include MANPRINT as a key performance parameter (KPP) when appropriate. For issues 4 & 5, the GOSC directed an independent assessment of MANPRINT organizational responsibilities and resource requirements.

The GOSC also agreed that the CG OPTEC, the Army's independent evaluator, serve as the conscience of the MANPRINT process.

During the next eleven months, the working group pursued actions and met periodically to update members with information for their principals. Actions accomplished during this period included:

- 1. OPTEC Interim Policy Guidance 97-3, subsequently included as App J of OPTEC Pam 73-13 (MANPRINT support to OPTEC Systems Teams), 12 Aug 97
- 2. TRADOC guidance on MANPRINT in Key Performance Parameters, 30 Sep 97
- 3. Army Acquisition Executive (AAE) Memorandum - MANPRINT inclusion in all acquisi tion categories, 7 Oct 97
- 4. Congressional Record Entry The Army's MANPRINT Program, 8 Oct 97
- 5. ASA(RDA) Correspondence to PMs and PEOs MANPRINT consideration required in all programs, 2 Dec 97
- 6. HQ TRADOC guidance on Soldier requirements in requirements documents, 19 Dec 97
- 7. ASA(RDA) guidance on revised format for Operational Requirements Documents (ORD)
- 8. ASA(MRA) sponsored MANPRINT trip to PM Comanche Sikorsky Test Facility, 24 Jun 98
- 9. ASA(RDA) Memorandum MANPRINT support to Advanced Technology Demonstrations (ATD), 24 Jun 98
- 10. AAE Memorandum MANPRINT inclusion in the source selection process, 21 Aug 98

- 11. HQ AMC Memorandum officially designating Army Research Laboratory Human Research and Engineering Directorate (HRED) as Integrated Concept Team and Integrated Product Team representatives and Pre-MS I MANPRINT experts for the Army, 21 Aug 98
- 12. HQ TRADOC Memorandum-MANPRINT Awareness through distance learning, 23 Feb 99

The final GOSC met on 4 August 1998. The WG provided updates on all actions and closed several of the issues. The GOSC agreed that the MANPRINT program requires additional funding. The members also agreed in concept to a MANPRINT Board of Directors (BOD).

A coordinating draft of the BOD Charter is currently working through HQDA. Upon approval, the actions and activities previously undertaken by the GOSC will be continued and enhanced by the Board of Directors. The GOSC took the first steps toward successfully reinvigorating MANPRINT, consistent with recognition that "Soldiers are our Credentials" and GOSC members established procedures to ensure soldiers are considered throughout the system acquisition process.

Meeting of Interest

AUSA Annual Meeting 11-13 October 1999

Marriott Wardman Park and Omni Shoreham Hotel Washington, DC

Metro Rail Red Line: Woodley Park/Zoo Station

DRAFT AGENDA

MANPRINT Symposium 1999

THEME: "Shaping MANPRINT for the Next Millennium"

DATES: 18-19 August 1999

LOCATION: Crystal Gateway Marriott in Crystal City/Arlington, VA

18 AUGUST

0730-0815	REGISTRATION & CONTINENTAL BREAKFAST
0815-0825	ADMIN REMARKS - Dr. Robert F. Holz, Acting Director for Personnel Technologies
0825-0840	WELCOMING REMARKS - LTG David H. Ohle, Deputy Chief of Staff for Personnel
0840-0900	MANPRINT ACHIEVEMENT AWARDS - 1998 - LTG David H. Ohle
	<u>DISTINGUISHED SPEAKERS</u>
0900-0920	Mr. Patrick Henry, Assistant Secretary of the Army for Manpower & Reserve Affairs: The Role of Manpower & Personnel in the MANPRINT Process
0920-0940	Mr. Paul J. Hoeper, Army Acquisition Executive: AAE Support and Guidance
0940-1000	$LTG\ Randall\ L.\ Rigby, Jr., DCG, U.S.\ Army\ Training\ and\ Doctrine\ Command:\ MANPRINT\ in\ the\ Requirements\ Determination\ Process$
1000-1015	BREAK
1015-1035	MG Albert J. Madora, CG, U.S. Army Operational Test & Evaluation Command: MANPRINT in Testing and Evaluation
1035-1055	BG John K. Schmitt, Director, Army Digitilization Office: MANPRINT & Digitizing the Force
1055-1115	Dr. Robin Keesee, Director, Human Research and Engineering Directorate, ARL: HRED's MANPRINT APPROACH
1115-1135	Mr. L. Taylor Jones, Director, Targets, Test & Evaluation, Military Technology, Inc.: How to Build a MANPRINT Team (Government/Contractor)
1135-1300	<u>LUNCH</u>
	PANEL I: MANAGING A MANPRINT PROGRAM
1300-1305	INTRODUCTION OF PRESENTERS
1305-1405	TEAM CRUSADER (PM/TSM/CONTRACTOR PM)
1405-1430	Q&A
1430-1450	BREAK

Continued on page 6

MANPRINT SYMPOSIUM AGENDA (Cont.)

	PANEL SESSION II: REGULATIONS UPDATE
1450-1455	INTRODUCTION OF PANEL MEMBERS
1455-1510	Ms. Marjorie Zelko, PERTEC: AR 602-2 UPDATE
1510-1540	Mr. Jim Inman, ASA (ALT): AR 70-1 & DA PAM 70-3 UPDATE
1540-1600	Q&A
1630-1730	NO HOST SOCIAL
	<u>19 AUGUST 1999</u>
0830-0900	CONTINENTAL BREAKFAST
	PANEL III: MANPRINT – PERSPECTIVES FROM MILITARY FORCES OUTSIDE THE US
0900-0905	Introduction of Speakers – Dr. Holz
0905-0925	Professor Phil Sutton, Ministry of Defence's Director of Research (Corporate), United Kingdom
0925-0945	Dr. Andrew L. Vallerand, Canadian Department of National Defence
0945-1005	Germany
1005-1020	BREAK
1020-1040	Israel
1040-1100	France
1100-1130	Questions and Discussions
1130-1300	Lunch
	PANEL SESSION IV: MANPRINT TOOLS
1300-1305	INTRODUCTION OF PANEL MEMBERS
1305-1315	Dr. Laurel Allender; HRED: IMPRINT
1315-1335	Dr. John Lockett, HRED: WinCrew and JACK
1335-1345	Mr. Rich Zigler, SLAD: PAL-MATE
1345-1355	Health Hazards: HH Cost Analysis Tool

Continued on page 7

Continued from page 6

MANPRINT SYMPOSIUM AGENDA (Cont.)

1355-1500 Mr. Dwight Lindsey, Safety Center: Risk Management Information Systems

1500-1510 Mr. Art Pridemore, PERSCOM: Manpower, Personnel & Training

1510-1530 Web Page & Training Update

1530-1600 Q & A

1600 CLOSING COMMENTS

Dr. Robert F. Holz

Acting Director for Personnel Technologies & MANPRINT

Pre-Registration Form
MANPRINT Symposium '99
August 18-19, 1999 Crystal Gateway Marriott
1700 Jefferson Davis Highway
Arlington, Virginia 22202
703-920-3230

(Please call hotel directly for reservations, NLT 30 July 99)

Spring 1999 Page 7

Telephone: Voice – (703) 241-0015 FAX – (703) 241-1262

AIS MANPRINT MANAGEMENT TOOL (current version is 3.2, Feb 97)

The AIS MANPRINT Management Tool is designed to provide support to MANPRINT analysts in estimating manpower, personnel, and training resources associated with an automated information system. The tool runs under Windows 3.1 or higher and uses a mouse for operation.

The first step in using the tool is to define the system. Attributes of the system include the name of the system, a brief description, the first year the system is operational, which is called the base year, and the number of years the system will be operational, which is called the system life. The base year and number of operational years determine the years for which manpower and training resources are estimated and are used in the computation of costs in terms of then-year dollars.

After the system is defined, the next step is to develop the Target Audience Description. To build the TAD, the user first defines the type of unit (ground, aviation, logistics, etc.) associated with the AIS and then assigns occupational categories (i.e., enlisted, warrant officer, commissioned officer, and civilian), specialty and grade, to each unit. The tool accesses specialty data in the AMCOS database to help the user assign specialties. Specialty data includes enlisted, warrant officer, commissioned officer, and general schedule (GS) civilian specialty designations, descriptions, and valid grade ranges. The user is allowed to define new specialties and assign them to the units.

The next step is to estimate manpower requirements. The fielding plan spreadsheet lists each unit from the TAD as a row and each year of system life as a column. For each row, the user enters the number of units that will be operational for each year. There is a manpower spreadsheet for each type of unit. The user enters the number of manpower positions of each category needed by a single unit and the tool computes the total number of positions for the category for each year by multiplying by the number of units operational as indicated in the fielding plan. The user can view manpower totals and costs by category (enlisted, warrant officer, commissioned officer, and civilian) by year.

The tool develops four lists of affected courses, one for each of the four personnel categories. The lists are used to manage the estimation of training costs, which is done one course at a time. Two types of training costs are estimated: the costs of developing or writing the course and the costs of delivering or teaching the course. Development costs are assumed to be one-time costs that are incurred in the base year for the system. Delivery costs may be incurred in each year of system life and are a function of the costs per graduate and the number of graduates. Both developmental and delivery cost estimation methodologies access the AMCOS database to compute personnel costs. When these steps have been completed, the user has developed a TAD, estimated manpower required, and estimated training costs. The conduct tradeoffs section can be used to display manpower estimates and training delivery costs in spreadsheets or in graphs. Also, manpower costs are computed in the tradeoff section and can be displayed in a spreadsheet or graph. However, the primary use of the tradeoff section is to compare two or more versions of a system, such as a baseline and one or more alternatives. The user first completes the steps from Define the System to Estimate Training for each version of the system. The user then uses the Conduct Tradeoffs step to compare the versions using spreadsheets and graphs.

Information on how to obtain the tool is available from the source listed below:

U.S. Army Research Laboratory Human Research and Engineering Directorate Attn: AMSRL-HR-MB, Bldg. 459 Aberdeen Proving Ground, NM 21005-5879

POC: Ms. Andrea Krausman (410) 278-5814/DSN 298-5814

FY 99 MANPRINT Training Schedule





MANPRINT ACTION OFFICER COURSE (MAOC)

<u>CLASS</u>	START DATE	END DATE	<u>LOCATION</u>
99-704	13 Jul 99	22 Jul 99	Ft Leonard Wood, MO
99-002	09 Aug 99	19 Aug 99	Ft Lee, VA
99-706	24 Aug 99	02 Sep 99	Huntsville (AMCOM), AL





MANPRINT TAILORED TRAINING (APPLICATIONS COURSE)

<u>CLASS</u>	START DATE	END DATE	LOCATION
99-501	29 Jun 99	30 Jun 99	Ft Lee, VA
99-709	03 Aug 99	05 Aug 99	Warren, MI
99-704	28 Sep 99	30 Sep 99	Ft Gordon, GA

(POC: Mr. Len Girling, COM (804) 765-4361, DSN 539-4361)

MANPRINT INFORMATION

Articles, comments, and suggestions are welcomed. Submit to: MANPRINT Quarterly, HQDA (DAPE-MR), 300 Army Pentagon, Washington, DC 20310-0300; DSN 225-7035, COM (703) 695-7035, FAX (703) 697-1283, E-mail: simmoms@hqda.army.mil

POLICY: Department of the Army, ODCSPER, ATTN: DAPE-MR, 300 Army Pentagon, Washington, DC 20310-0300, DSN 225-7035, COM (703) 695-7035.

DIRECTORY OF DESIGN SUPPORT METHODS: Defense Technical Information Center–MATRIS Office, DTIC-AM, 53355 Cole Road, San Diego, CA 92152-7213, DSN 553-7006, COM (619) 553-7006, E-mail:ddsm@dticam.dtic.mil, and World Wide Web: http://dticam.dtic.mil/hsi/

MANPRINT DOMAIN POCs:

MANPOWER, PERSONNEL & TRAINING:

Mr. Steve Dwyer, U.S. Army Training and Doctrine Command, ATTN: ATCD-RP, Fort Monroe, VA 23651-5000, DSN 680-3477, COM (804) 727-3477, FAX: 680-2483, E-mail: dwyers@monroe.army.mil. Mr. Arthur L. Pridemore, U.S. Total Army Personnel Command, ATTN: TAPC-PLC-M, 200 Stovall Street, Alexandria, VA 22332-0406, DSN 221-2024, COM (703) 325-2024, FAX: 221-0657, E-mail: pridemoa@hoffman-emh1.army.mil

HUMAN FACTORS ENGINEERING: Dr. Edwin R. Smootz, Chief, Human Factors Integration Division, HRED, Army Research Laboratory, ATTN: AMSRL-HR-M, Aberdeen Proving Ground, MD 21005-5425, DSN 298-5817, COM (410) 278-5817, FAX: 298-8823, E-mail: esmootz@arl.mil

SYSTEM SAFETY: Mr. Dwight Lindsey, U.S. Army Safety Center, ATTN: CSSC-ISE, Fort Rucker, AL 36362-5363, DSN 558-1373, COM (334) 255-1373, FAX: 558-9528, E-mail: lindseyd@safety-emh1.army.mil

HEALTH HAZARDS: Mr. Mike McDevitt or Mr. Bob Gross, U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM), ATTN: MCHB-DC-OHH, Aberdeen Proving Ground, MD 21010-5422, DSN 298-5878, COM (410) 436-2925, FAX: 298-1016, E-mail: w.michael.mcdevitt@apg.amedd.army.mil or robert.gross@apg.amedd.army.mil

SOLDIER SURVIVABILITY: Mr. Richard Zigler, U.S. Army Research Laboratory, ATTN: AMSRL-SL-I, Aberdeen Proving Ground, MD 21005-5068, DSN 298-8625, COM (410) 278-8625, FAX: 298-7254, E-mail: rzigler@arl.mil

Bob Holz

Acting Director for Personnel Technologies

The MANPRINT Quarterly is an official bulletin of the Office of the Deputy Chief of Staff for Personnel (ODCSPER), Department of the Army. The Manpower and Personnel Integration (MANPRINT) program (AR 602-2) is a comprehensive management and technical initiative to enhance human performance and reliability during weapons system and equipment design, development and production. MANPRINT encompasses the seven domains of personnel capabilities, manpower, training, human factors engineering, system safety, health hazards and soldier survivability. The focus of MANPRINT is to integrate technology, people, and force structure to meet mission objectives under all environmental conditions at the lowest possible life-cycle cost. Information contained in this bulletin covers policies, procedures, and other items of interest concerning the MANPRINT Program. Statements and opinions expressed are not necessarily those of the Department of the Army. This bulletin is prepared quarterly under contract for the Personnel Technologies Directorate, Office of the Deputy Chief of Staff for Personnel under the provisions of AR 25-30 as a functional bulletin.

READER'S RESPONSE

Use this space to record changes, additions or deletions. Send your information by Fax (703) 697-1283 or mail (fold on designated line and close (do not staple) with the MANPRINT Quarterly address on the outside). If you are a MANPRINT POC for your organization, please check the MANPRINT POC block.

New	Delete	Change	MANPRINT POC
Name			
Rank/Title	First	M.I.	Last
1 Hone			
		- 171X -	
Comments			
		Fold Here	
From:			
	То:		
	MANPRINT Quarterly		

HQDA (DAPE-MR) 300 Army Pentagon Washington, DC 20310-0300

HQDA (DAPE-MR) 300 Army Pentagon Washington, DC 20310-0300 FIRST CLASS